IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Currently Amended) A liquid discharge apparatus comprising:

a liquid discharge head comprising a discharge port for discharging liquid;

a liquid flow path communicating with said discharge port and having a bubble generating region for generating a bubble;

a discharge energy generating element for generating thermal energy for generating the bubble in the liquid inside said bubble generating region;

a movable member facing said discharge energy generating element and spaced apart from said discharge energy generating element, an end portion of said movable member situated at an upstream side in the flow direction of the liquid inside said liquid flow path is fixed and a down stream end of said movable member is a free end;

~~means for detecting an ink supply state~~ a temperature sensor for periodically detecting, at a predetermined period, a temperature inside said liquid flow path; and

means for controlling or stopping the driving ~~to~~ of said discharge energy generating element ~~when a judgment is made that the ink is partially present in said flow path and the ink is not normally supplied based on the detection result of the ink supply state inside said liquid flow path~~ by judging that the liquid is not normally supplied based on a temperature rise per period detected by said temperature sensor.

2. (Cancelled).

3. (Previously Presented) The liquid discharge apparatus according to Claim 1, further comprising a driving signal supply means for supplying a driving signal for allowing the liquid to eject from said liquid discharge head.

4. (Previously Presented) The liquid discharge apparatus according to Claim 1, further comprising a conveyance means for conveying the medium to be recorded which receives the liquid discharged from said liquid discharge head.

5. (Currently Amended) A valve protection method of a liquid discharge head having a discharge port for discharging liquid, a heat generating element inside a liquid flow path communicating ~~with a~~ with the discharge ~~port and~~ port, a movable member ~~plate~~ for directing a bubble growing by a film boiling on ~~said~~ the heat generating element to a side of ~~said~~ the discharge port, and a temperature sensor for detecting a temperature inside the liquid flow path, said method comprising the steps of:

~~wherein an ink supply state inside said liquid flow path is detected and the driving to said heat generating element is controlled or stopped when a judgment is made that an ink is partially present in said flow path and the ink is not normally supplied based on a detection result of said ink supply state~~

detecting periodically, at a predetermined period, a temperature inside the liquid flow path; and

controlling or stopping the driving of the heat generating element by judging that the liquid is not normally supplied based on a temperature rise per period inside the liquid flow path, as detected in said detecting step.

6 and 7. (Cancelled).

8. (New) The liquid discharge apparatus according to Claim 1, wherein said means for controlling or stopping the driving of said discharge energy generating element judges that the liquid is not normally supplied based on a printing date and the temperature rise per period inside said liquid flow path detected by said temperature sensor.

9. (New) The valve protection method according to Claim 5, wherein said step of controlling or stopping the driving of the heat generating element comprises judging that the liquid is not normally supplied based on a printing date and the temperature rise per period inside the liquid flow path detected by the temperature sensor in said detecting step.